Abstract of the Disclosure

A method acquires compressed videos. Intra-, or inter-frames of each compressed video are acquired at a fixed sampling rate. Joint analysis is applied concurrently and in parallel to the compressed videos to determine a variable and non-uniform temporal sampling rate for each compressed video so that a combined distortion is minimized and a combined frame rate constraint is satisfied. Each compressed video is then sampled at the associated variable and non-uniform temporal sampling rate to produce output compressed videos having variable temporal resolutions.